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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,328	09/05/2000	Esa Harna	297-009750-US(PAR)	7884

2512 7590 01/09/2004

PERMAN & GREEN  
425 POST ROAD  
FAIRFIELD, CT 06824

EXAMINER

PHU, PHUONG M

ART UNIT	PAPER NUMBER
2631	

DATE MAILED: 01/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/655,328

Applicant(s)

HARMA ET AL.

Examiner

Phuong Phu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,9 and 13-18 is/are rejected.
- 7) ☒ Claim(s) 3,6-8 and 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4 . 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The abstract of the disclosure is objected to because it contains more than 150 words; and "Figure 4" on the last line is suggested to be deleted. Correction is required. See MPEP § 608.01(b).

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The specification is objected to because the section BRIEF DESCRIPTION OF DRAWINGS does not have a description for figure 12. Correction is required.

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1, 2, 4, 5, 9, 13, 14 and 15-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Citta et al (5,534,938) in view of Fimoff et al (5,987,070).

As per claims 1, 9, 15 and 16, see figures 1 and 5 and col. 4, line 10 to col. 8, line 24, Citta et al discloses a wire-communication method and associated system comprising:

a transmitting device (figure 1) wherein the transmitting device comprises:

primary transmitter step/means (11, 17, 21) for generating digital data signal in format of data signal levels into an output line outputted from means (21); said data signal levels being selected from a first group of levels; and

secondary transmitter step/means (13, 15, 21) for generating digital synchronization signal in format of synchronization signal levels into said output line, said synchronization signal levels being selected from a second group of levels which can consists of different levels than said first group levels (see col. 7, lines 34-35);

a receiving device (figure 5) for receiving said data signal levels and synchronization signal levels for further processing in means (72) and stages followed for recovering original video digital bit sequence signals generated previously from means (11) and displaying their images (see col. 1, lines 24-26).

Further regarding to claims 1, 15 and 16, Citta et al is silent about whether said data signal levels and synchronization signal levels are formed by converting processes, as claimed. Fimoff et al teaches a converting process (12, 14) of a multi-level mapping for converting a serial sequence of digital bits into successive signal levels (see figure 3, and col. 3, line 62 to col. 4 line 39). On the other hand, in Citta et al, said data signal levels and synchronization signal levels are formed from digital signals provided from means (11) and (13, 15), respectively, and

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therefore, it is inherently that a converting processes must be included or needed in steps/means (11, 17, 21) and (13, 15, 21) for converting said digital signals into corresponding signal levels. It would have been obvious for one skilled in the art, when building or carrying out Citta et al method/system, to implement respective converting processes, as taught by Fimoff et al, in means (11, 17, 21) and (13, 15, 21) for converting respective digital signals into said data signal levels and synchronization signal levels.

Further regarding to claims 9 and 15, Citta et al in view of Fimoff et al is silent about that the a receiving device (Citta et al, figure 5) comprises a primary receiver means and a secondary receiver means, as claimed. Fimoff et al discloses a receiver means (26) wherein the receiver means, responsive to a group of signal levels, converts received signal levels outputted from means (24) into digital bit sequences for further processing (see figures 4 and 5, and col. 4, line 60 to col. 6, line 30). On the other hand, in Citta et al in view of Fimoff et al, it is inherent that means (72) and stages followed (see Citta et al, figure 5), for recovery of original video digital bit sequence signals generated previously from means (11) (see Citta et al, figure 1), need to convert said received data signal levels into respective digital bit sequences and display images of the digital bit sequences . Further, at a receiving site, using received sync signals, which are transmitted along with video signals from the transmit site, in a synchronization purpose for displaying images of said video signals, is well-known in the art, and the examiner takes Official Notice. It would have been obvious for one skilled in the art, when building the receiving device in Citta et al system in view of Fimoff et, to implement a primary receiver means, as taught by Fimoff et al, and a secondary receiver means, as taught by Fimoff et al, in either of means (72) and stages followed wherein the first primary receiver means, responsive to the first group of

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signal levels for recovering said original video digital bit sequences, would convert corresponding signal levels outputted from means (76) (see Citta et al, figure 5) into said original video digital bit sequences, and wherein the secondary primary receiver means, responsive to the second group of signal levels for recovering original digital sync signal generated from means (13, 15) (see Citta et al, figure 1), would convert corresponding signal levels outputted from means (76) into said original digital sync signal for a synchronization purpose in displaying images of said original video digital bit sequences.

As per claims 2 and 17, Citta et al discloses step/means for disabling the output data signal levels into said output line for the time of outputting synchronization signal levels into said output line (see col. 4, lines 20-22).

As per claim 4, Citta et al discloses that said primary transmitter step/means and secondary transmitter step/means are implemented as a complementary modes in a single controllable transmitter (figure 1) having a control circuit, which includes control lines, for controlling its mode factor (see col. 4, lines 20-22).

As per claim 5, Citta et al discloses means (21) for summing the outputs of said primary transmitter step/means and secondary transmitter step/means into said combined output levels in said output line (see figure 1).

As per claim 13, Citta et al in view of Fimoff et al discloses that said primary receiver means and secondary receiver means are implemented within a mapping to map a number of input signal levels into corresponding bit combinations (see Fimoff et al, figure 5) wherein the reception of signal level belong to said first group of signal levels can correspond to different bit

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combinations than the reception of signal levels belong to said second group of signal levels (see Citta et al, col. 7, lines 34-35).

As per claim 14, Citta et al in view of Fimoff et al discloses an A/D converter (24) and an associated logic block (26) (see Fimoff et al, figure 4).

As per claim 18, Citta et al discloses that synchronization signal levels are upheld so that the synchronization signal levels is added with the synchronization signal levels in sequence in said output line (see col. 4, lines 20-22).

***Allowable Subject Matter***

7. Claims 3, 6-8 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 703-308-0158. The examiner can normally be reached on M-F (8:30-6:00) First Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Phuong Phu  
Primary Examiner  
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Phuong Phu

12/04/03

*Phung phu*

**PHOUNG PHU  
PRIMARY EXAMINER**